

2
Q
Cm 4
metal layer is made of one of aluminum, an aluminum alloy, AlNd, copper and a copper alloy, and the second metal layer is made of one of Cr, Cr-alloy, Mo, Mo-alloy, Ta, Ta-alloy, W, and W-alloy.--

Please replace the paragraph beginning on page 5, line 17, with the following rewritten paragraph: ✓

Q3
--The electrode line may have first, second and third metal layers of a three-layered structure, and a side portion of the second metal layer is less etched to protrude beyond that of the first and third metal layers.--

Please replace the paragraph beginning on page 6, line 19, with the following rewritten paragraph: ✓

Q4
--Figs. 4A and 4B are cross-sectional views illustrating a method of forming an electrode line 51 and an insulating layer 54. First, as shown in Fig. 4A, first and second metal layers 50 and 52 are sequentially deposited on a substrate 1 and then are patterned into a wire electrode 51 of a dual-layered structure. The first metal layer 50 is made of a low resistive metal such as an aluminum-based metal and a copper-based metal. The second metal layer 52 is made of a material having a high corrosion resistance, for example, Cr, Mo, Ta, W, or their alloy.--

Please replace the paragraph beginning on page 7, line 7, with the following rewritten paragraph: ✓

Q5
--The electrode line 51 has an overhang portion due to a difference of an etching rate between the first and second metal

Q5
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layers 50 and 52. In the conventional art, in order to remove the overhang portion, the dry-etching process is additionally performed. In order to insulate the electrode line, an inorganic insulating layer made of SiNx or SiO₂ is formed. However, in the preferred embodiment of the present invention, in order to insulate the electrode line 51 having the overhang portion, an organic insulating layer 54 is applied using a coating technique, and therefore it is easy to form the organic insulating layer 54 compared with the conventional art using a vacuum deposition technique. Further, since the organic insulating layer 54 is excellent in flatness and has a dielectric constant of less than 3(three), there is an advantage that an aperture ratio of a liquid crystal display device can be improved.--

Please replace the paragraph beginning on page 8, line 3, with the following rewritten paragraph:

ab

--Fig. 5 is a cross-sectional view illustrating a method of forming an organic insulating layer when a wire electrode of a three-layered structure is formed according to the preferred embodiment of the present invention. As shown in Fig. 5, a first metal layer 60 is formed on a substrate 1, and a second metal layer 62 is formed on the first metal layer 60. Further, a third metal layer 64 is formed on the second metal layer 62. An organic insulating layer 54 is formed over the whole surface of the substrate 1 while covering the first, second and third metal layers

26
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60, 62 and 64. The first and third metal layers 60 and 64 is made of a low resistive material such as an aluminum-based metal or a copper-based metal. The second metal layer 62 is made of a material having high corrosion resistance such as Cr, Mo, Ta, W, or their alloys.--

Please replace the paragraph beginning on page 8, line 22, with the following rewritten paragraph:

27

--Even though not shown, the organic insulating layer according to the preferred embodiment of the present invention can be applied to a method of manufacturing an electrode line having no overhang but a taper angle of more than 45° from a top surface of the electrode line. In other words, when the electrode line is a single-layered structure and has a taper angle of more than 45°, it is preferable that the organic insulating layer is formed as an insulating layer for insulating the electrode line. Therefore, defects such as a line open can be prevented.--

IN THE CLAIMS

Please amend the claims as follows:

- 28
1. (Amended) A method of manufacturing an array substrate, comprising:
 - forming an electrode line on a substrate using a wet etching technique; and
 - forming an organic insulating layer on an exposed surface of